

Differential scanning calorimetry (DSC) and thermogravimetric analysis (TGA) were done by using a TA instruments Model 3000 thermal analyst based on IBM PS/253 Model 60 computer and equipped with a Model 2050 TGA unit and a Model 2920 DSC unit. DSC thermograms were obtained in flowing nitrogen at a heating rate of 10 °C/min. The melting points of compounds, where feasible, were determined from the DSC scans. The FT-IR spectra were taken on KBr pellets of the compounds using a Nicolet Model 20SWC Fourier transform infrared spectrometer under nitrogen.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra included here were taken at 200 MHz on a Bruker DPX 200 instrument. Literature reference  $^{13}\text{C}$  NMR spectra of quinoline, 2-phenylquinoline, and 10-methylphenothiazine (10-MP) were found at the database website: <http://www.aist.go.jp>.

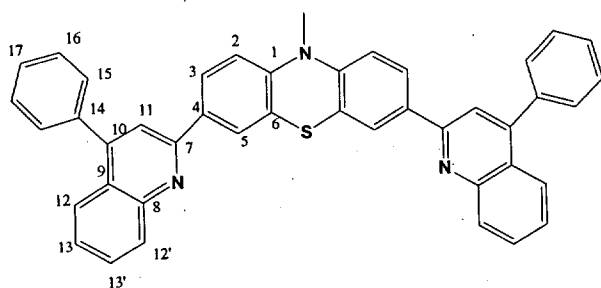


Fig. S1. Molecular structure of BPQ-PTZ for  $^{13}\text{C}$  NMR analysis and assignment.

```

NAME bpqptz-13c
EXPNO 1
PROCNO 1
USER genuser
DU U
TD 32768
NS 741
DS 0
SW 260.389 ppm
SHW 13104.74 Hz
FW 79617.84 Hz
AQ 1.250 sec
DW 38.154 usec
DE 35.000 usec
DR 17
SF01 50.33 MHz
BF1 50.32 MHz
O1 4825.45 Hz
SF02 200.13 MHz
BF2 200.13 MHz
O2 800.52 Hz
O1 4.000 sec
P1 8.0 usec
AUNM au_z9
PULPROG zgpg30
NUCLEUS off
DECNUC off
SI 32768
SR 0.00 Hz
HZpPT 0.40 Hz
SW_p 13104.741 ppm
SSB 0
LB 0.00 Hz
GB 0.00 Hz
PHC0 -45.50 degrees
PHC1 -105.71 degrees
ABSF1 10.000 ppm
ABSF2 0.000 ppm
WDW no
    
```

```

1899966
4400066
4400066
4400066
4400066
4400066
    
```



```

2259959
2259959
2259959
2259959
2259959
2259959
2259959
2259959
2259959
2259959
    
```

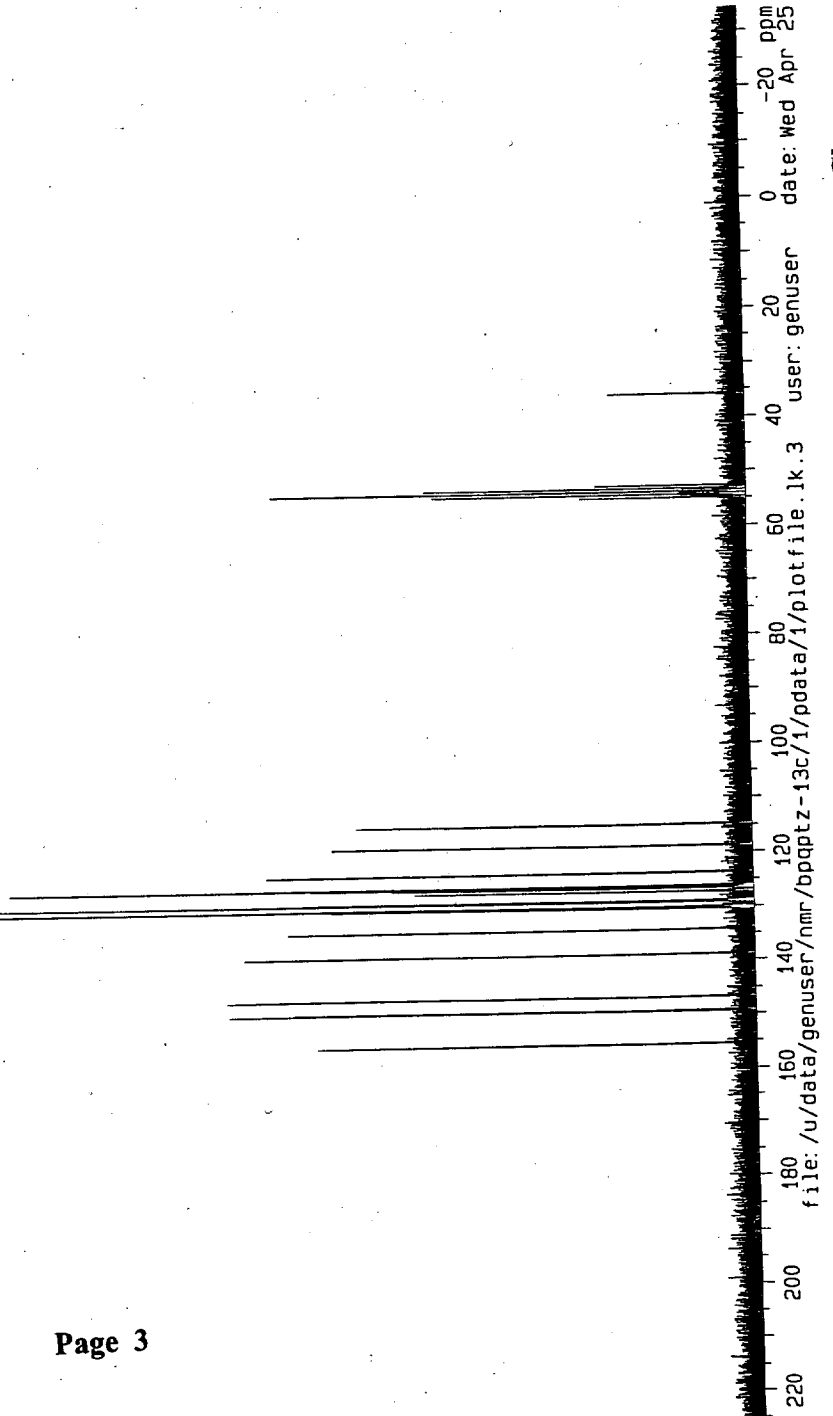
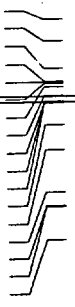


Fig.2s. <sup>13</sup>C NMR spectrum of BPQ-PTZ in CD<sub>2</sub>Cl<sub>2</sub>.

BPQ-PTZ

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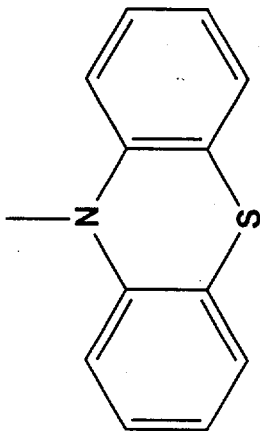
13C



146.418  
128.148  
127.761  
126.944  
125.100  
114.787

35.743

NAME Npthiazine  
EXPNO 1  
PROCNO 1  
USER genuser  
DU U  
TD 32768  
NS 26  
DS 0  
SW 260.389 ppm  
SWH 13104.74 Hz  
FW 79617.84 Hz  
AQ 1.250 sec  
DW 38.154 usec  
DE 35.000 usec  
DR 17  
SF01 50.33 MHz  
BF1 50.32 MHz  
O1 4825.45 Hz  
SF02 200.13 MHz  
BF2 200.13 MHz  
O2 800.52 Hz  
D1 4.000 sec  
P1 8.0 usec  
AUNM au\_z9  
PULPROG zgpg30  
NUCLEUS off  
DECNUC off  
SI 32768  
SR 0.00 Hz  
HZPPT 0.40 Hz  
SW\_p 13104.741 ppm  
SSB 0  
LB 0.00 Hz  
GB 0.00 Hz  
PHC0 235.80 degrees  
PHC1 -69.85 degrees  
ABSF1 10.000 ppm  
ABSF2 0.000 ppm  
WDW no



N-Methylphenothiazine



220 180 160 140 120 100 80 60 40 20 0 -20 ppm  
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Fig.3s. <sup>13</sup>C NMR spectrum of 10-MP in CD<sub>2</sub>Cl<sub>2</sub>.

DEPT135



128.147  
127.758  
123.101  
114.787

35.747

```

NAME Npthiazine 1
EXPNO 1
PROCNO 1
USER genuser
DU U
TD 32768
NS 25
DS 2
SW 260.389 ppm
SHW 13104.74 Hz
FW 79617.84 Hz
AQ 1.250 sec
DM 38.154 usec
DE 4.500 usec
DR 17
SF01 50.33 MHz
BF1 50.32 MHz
O1 4825.45 Hz
SF02 200.13 MHz
BF2 200.13 MHz
O2 800.52 Hz
D1 1.000 sec
P1 13.0 usec
AUNM au_z9
PULPROG dept135
NUCLEUS off
DECNUC off
SI 32768
SR 0.00 Hz
HZPPT 0.40 Hz
SW_D 13104.741 ppm
SSB 0
LB 0.00 Hz
GB 0.00 Hz
PHC0 102.30 degrees
PHC1 -145.22 degrees
ABSF1 10.000 ppm
ABSF2 0.000 ppm
WDW no
    
```

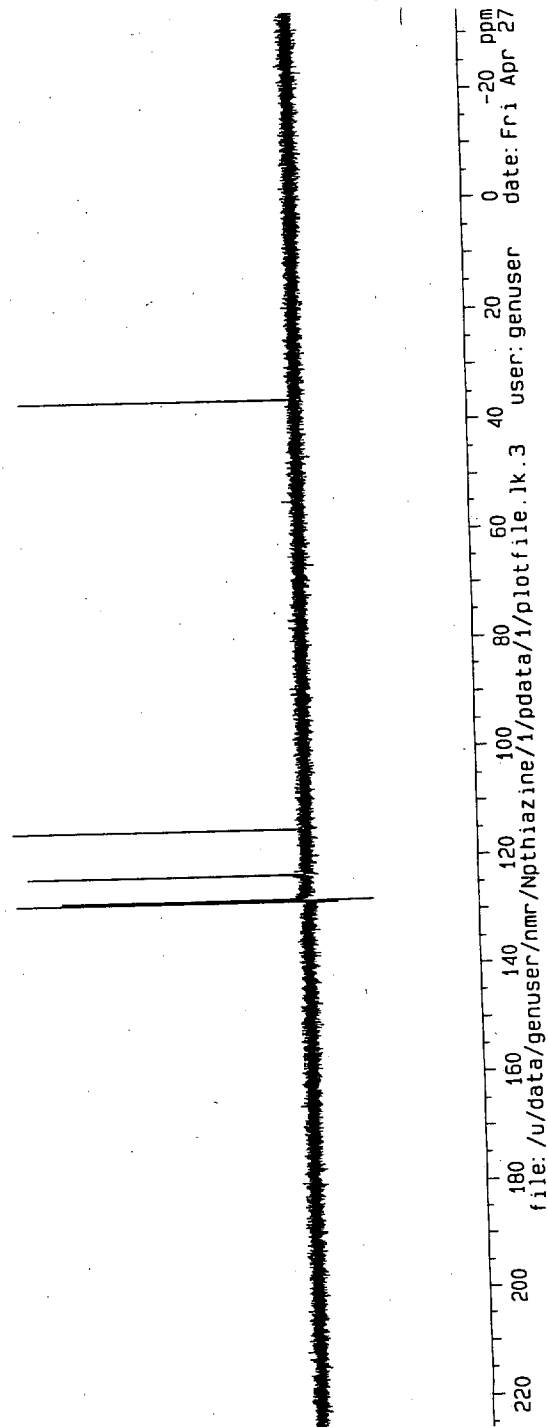


Fig.4s. DEPT 135-NMR spectrum of 10-MP in CD<sub>2</sub>Cl<sub>2</sub>.

```

NAME      bpqptz-1h
EXPNO     1
PROCNO    1
USER      genuser
DU         U
TD         16384
NS         15
DS         0
SW         14.978 ppm
SWH        2997.60 Hz
FW         90000.00 Hz
AQ         2.733 sec
DW         166.800 usec
DE         4.500 usec
DR         18
SFO1       200.13 MHz
BF1        200.13 MHz
O1         1235.88 Hz
SFO2       200.13 MHz
BF2        200.13 MHz
O2         1235.88 Hz
D1         1.000 sec
P1         15.0 usec
AUNM      au_z9
PULPROG    zg
NUCLEUS    off
DECNUC     off
SI          16384
SR          0.00 Hz
HZpPT      0.18 Hz
SW_p       2997.602 ppm
SSB         0
LB         0.00 Hz
GB         0.00 Hz
PHCO       229.44 degrees
PHC1       -8.08 degrees
ABSF1      10.000 ppm
ABSF2      0.000 ppm
WDW         no
    
```

```

2.49  2.08  1.60  1.19  0.77  0.69  0.66  0.63  0.60  0.57  0.54  0.51  0.48
7.77  7.77  7.77  7.77  7.77  7.77  7.77  7.77  7.77  7.77  7.77  7.77  7.77
5.47  5.41  5.35  5.29  5.23  5.17  5.11  5.05  4.99  4.93  4.87  4.81  4.75
6.96  6.96  6.96  6.96  6.96  6.96  6.96  6.96  6.96  6.96  6.96  6.96  6.96
5.378  3.482
    
```

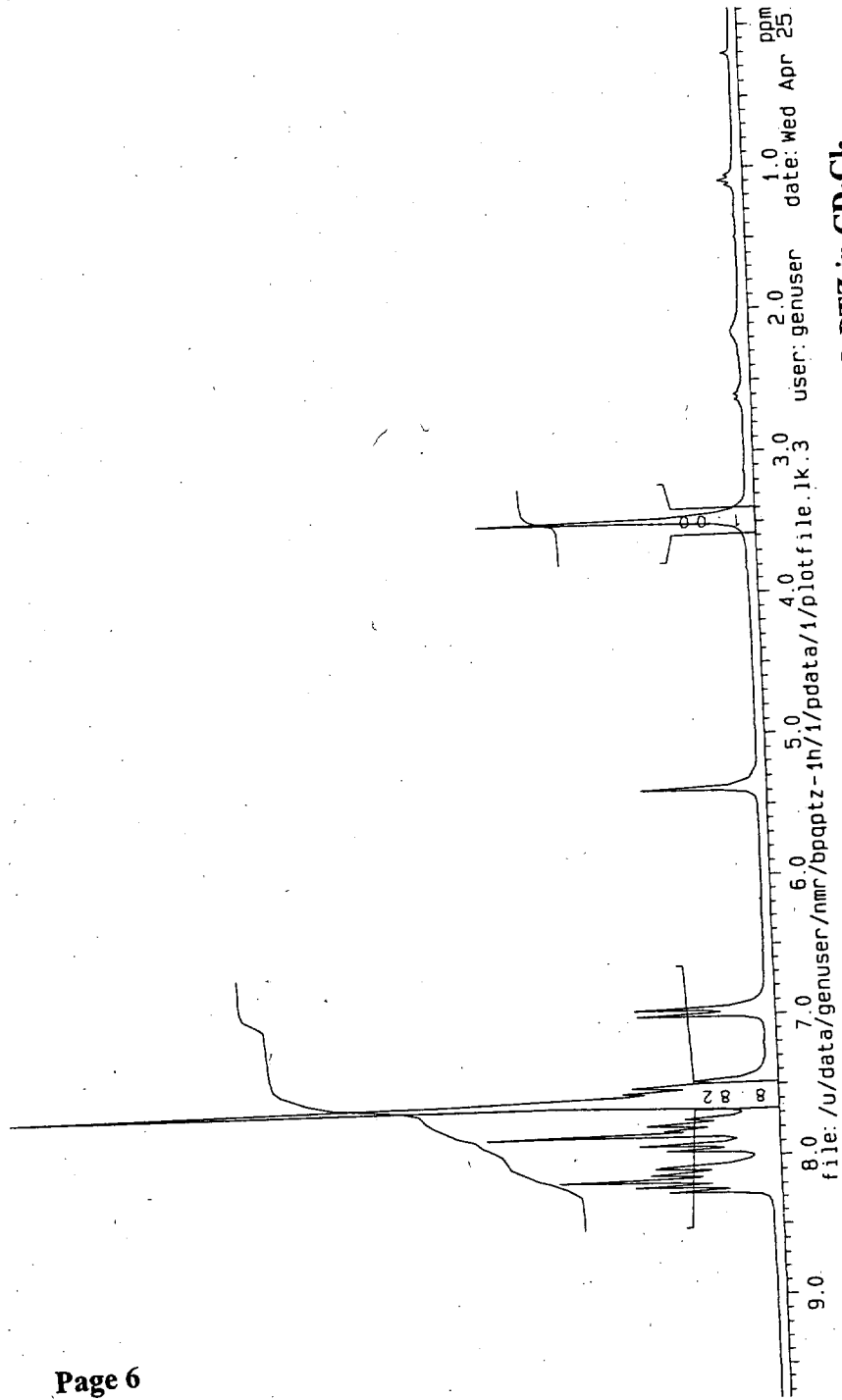


Fig.5s. <sup>1</sup>H NMR spectrum of BPQ-PTZ in CD<sub>2</sub>Cl<sub>2</sub>